

# Māori and the Otautahi/Christchurch Earthquakes



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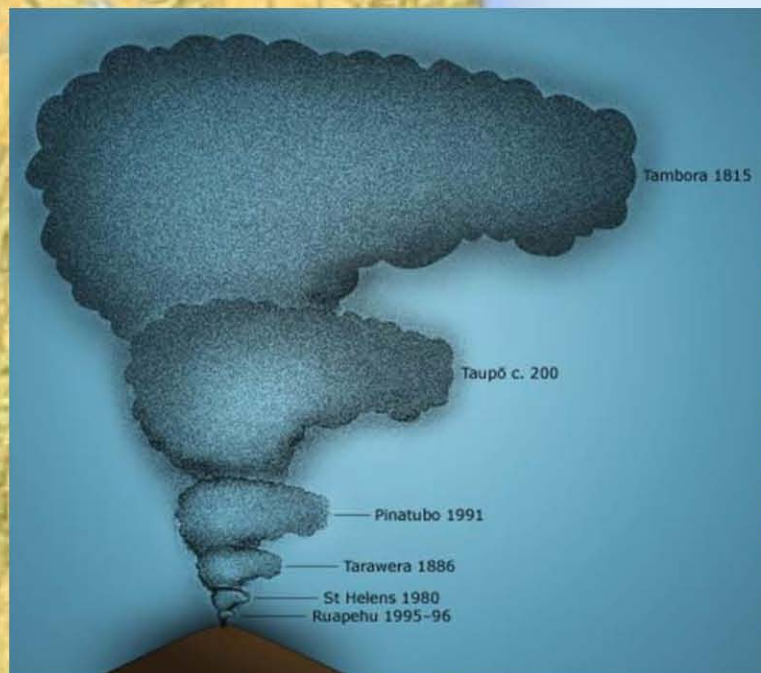


# Lincoln Research projects

- LURF
  - Internal Lincoln funding
    - Quick grab of data = 10 interviews (Maori emergency workers, managers in CBD Feb 22)
    - Detailed email survey (n=41)
- TPK
  - Social and economic affects on Whanau  
10 + 10 interviews
- Ngā Pae o te Māramatanga
  - Maori mental health networks
    - Partnering with Te Awa o te Ora and Mental Health Education and Resource Centre (MHERC)







# WELLINGTON 1855

Four deaths



Landslip caused by earthquake  
near Wellington N Zealand.

Jan. 1855.



# Tarawera 1886

108 confirmed deaths  
(101 Maori)



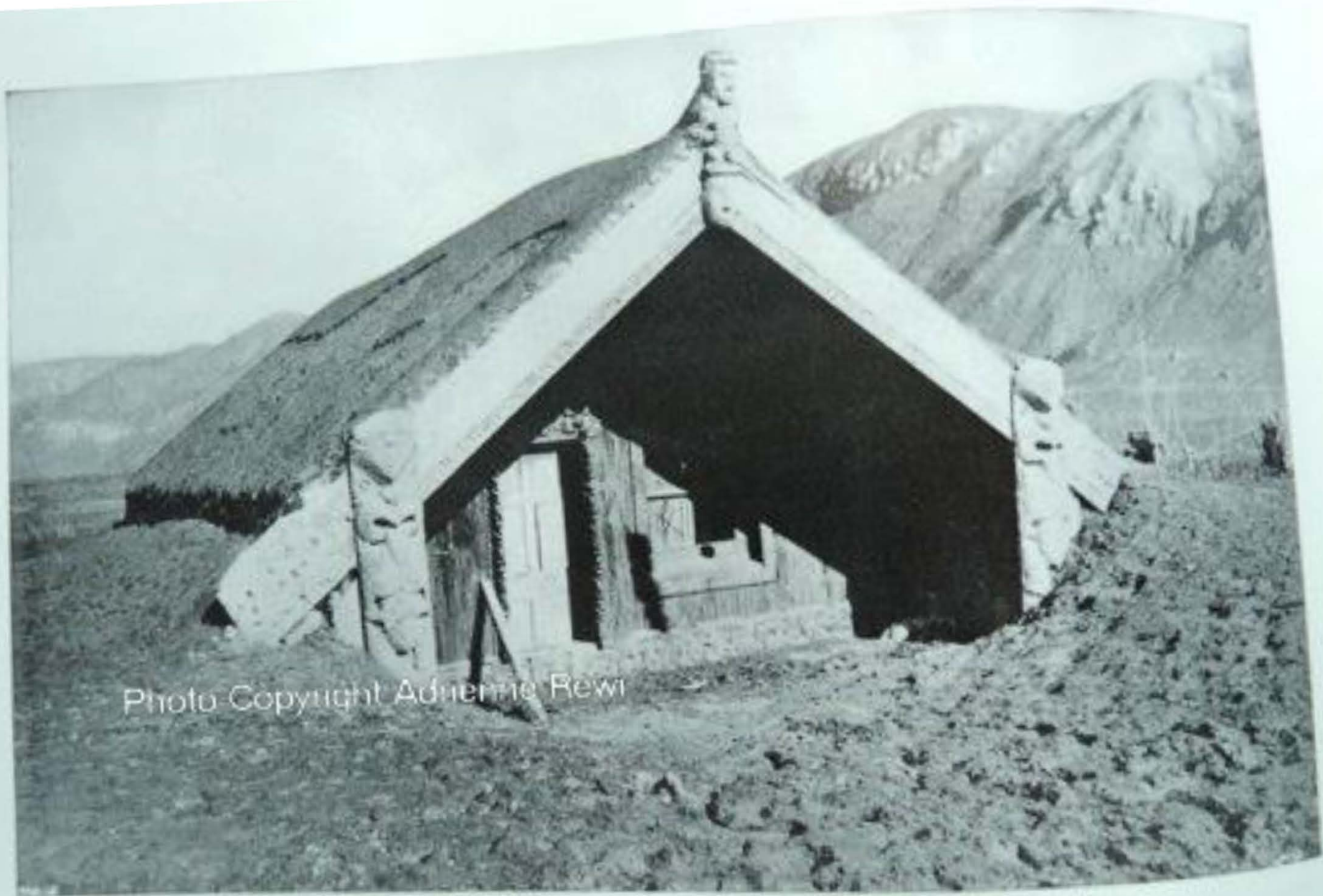


Photo Copyright Adrienne Rewi

Huiamiki, the whare Runanga or Meeting House of the local natives, where most of the Maoris sheltered. As with guide Sophia's whare, the roof was periodically raked clear of mud to relieve the weight, and so withstood disaster.





Samuel Wilson 1877  
22.1.1877



# NAPIER 1931



... 256 deaths







# Maori in Christchurch

	1996	Total 2001	2006	1996	Māori 2001	2006
Area						
Hurunui District	9620	10150	10750	640	560	660
Waimakariri District	33000	37900	44100	2270	2630	3080
Christchurch City	325700	335300	<b>361800</b>	23600	24700	<b>28200</b>
Selwyn District	25500	28300	35000	1650	1710	2230
Ashburton District	25700	26000	28000	1210	1270	1760

# Maori in Neighbourhoods...

Suburb	No. of people	Median age	Median personal income	% Māori
Aranui	4,671	32	\$18,000	21.3%
Phillipstown	3,489	29	\$20,200	16.7%
Linwood North	2,547	32	\$20,900	16.6%
Bromley	2,976	33	\$22,100	16.2%
Linwood East	1,890	34	\$19,900	15.3%
Bexley	4,134	34	\$21,400	15.1%
Chisnall	2,859	34	\$21,200	14.6%
Woolston	2,394	33	\$21,500	14.4%
Woolston South	2,394	33	\$21,500	14.4%
Waltham	1,071	31	\$22,800	14.1%
Woolston West	2,394	33	\$21,500	13.2%
Avondale	3,240	35	\$21,600	12.3%
Avonside	3,240	35	\$21,600	12.3%
Linwood	4,587	31	\$19,600	11.7%
Kaiapoi South	2,199	40	\$19,900	11.2%
Kaiapoi North	4,143	37	\$23,300	11.0%
Richmond North	2,937	35	\$24,500	10.5%
Shirley West	3,639	34	\$21,500	10.2%
North Beach	4,680	34	\$23,000	10.1%
Richmond South	2,469	34	\$21,100	10.0%
Lyttleton	3,072	40	\$28,400	9.2%
Christchurch	348,435	36	\$23,400	7.3%



Feb 22<sup>nd</sup> 2011



# Individuals

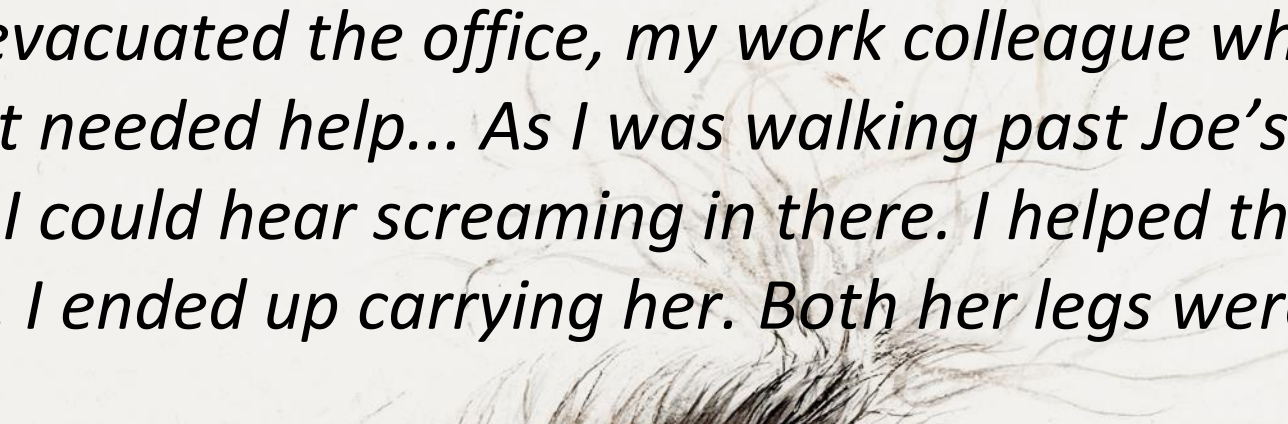
- Interviewed 10 Maori involved in emergency response (incl. USAR, police, marae managers)





# Individuals

*When I evacuated the office, my work colleague who was pregnant needed help... As I was walking past Joe's Garage, I could hear screaming in there. I helped this one lady out, I ended up carrying her. Both her legs were crushed.*



*Me personally? Oh I didn't have time to be affected by the earthquake... on the day we were in the CBD ... I was more worried about my entire team dying in front of my eyes actually.*

# Whanau

*I wrapped her up and said a little prayer to myself. 'If this is it, please protect my girl.'*

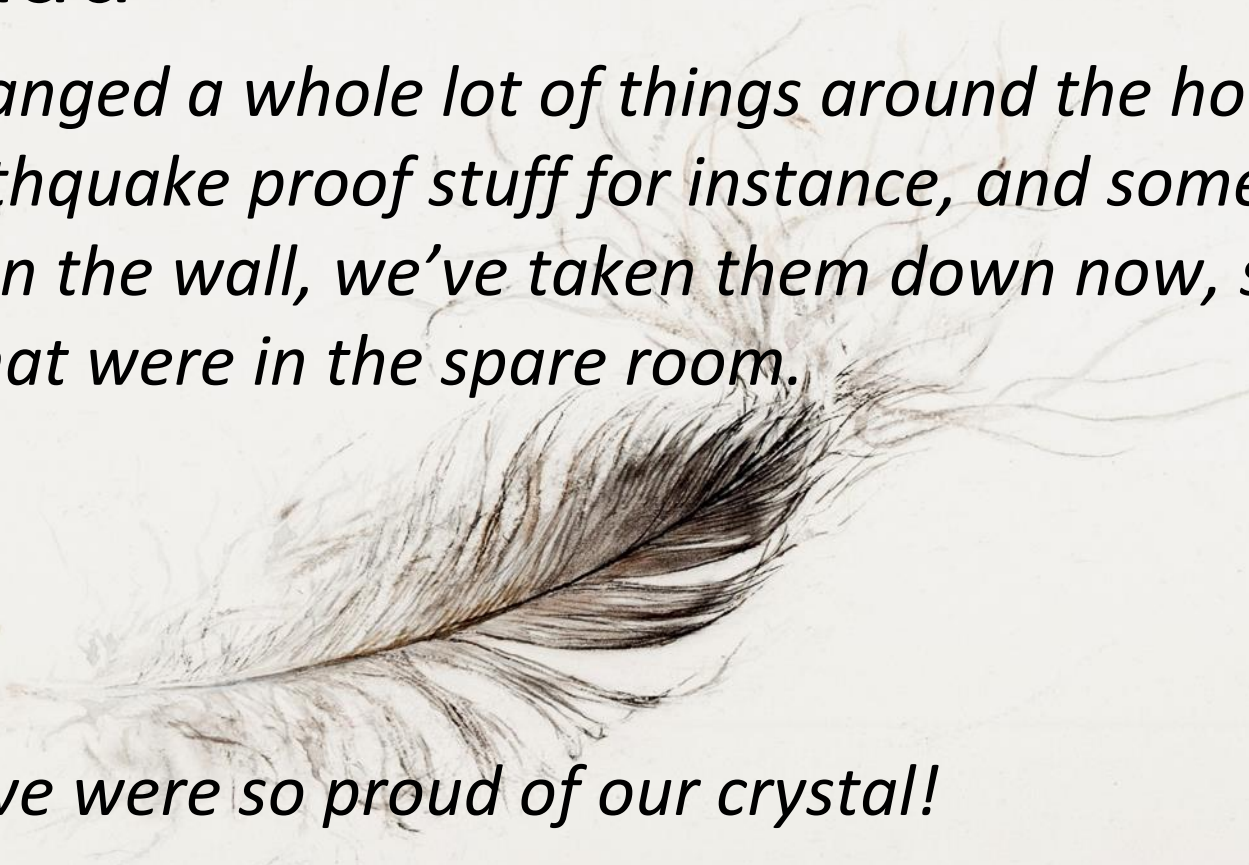


*I just stood there waiting for the floor to fall through so I could catch [our girl].*



# Whanau

*We've changed a whole lot of things around the house, some earthquake proof stuff for instance, and some pictures on the wall, we've taken them down now, some mirrors that were in the spare room.*

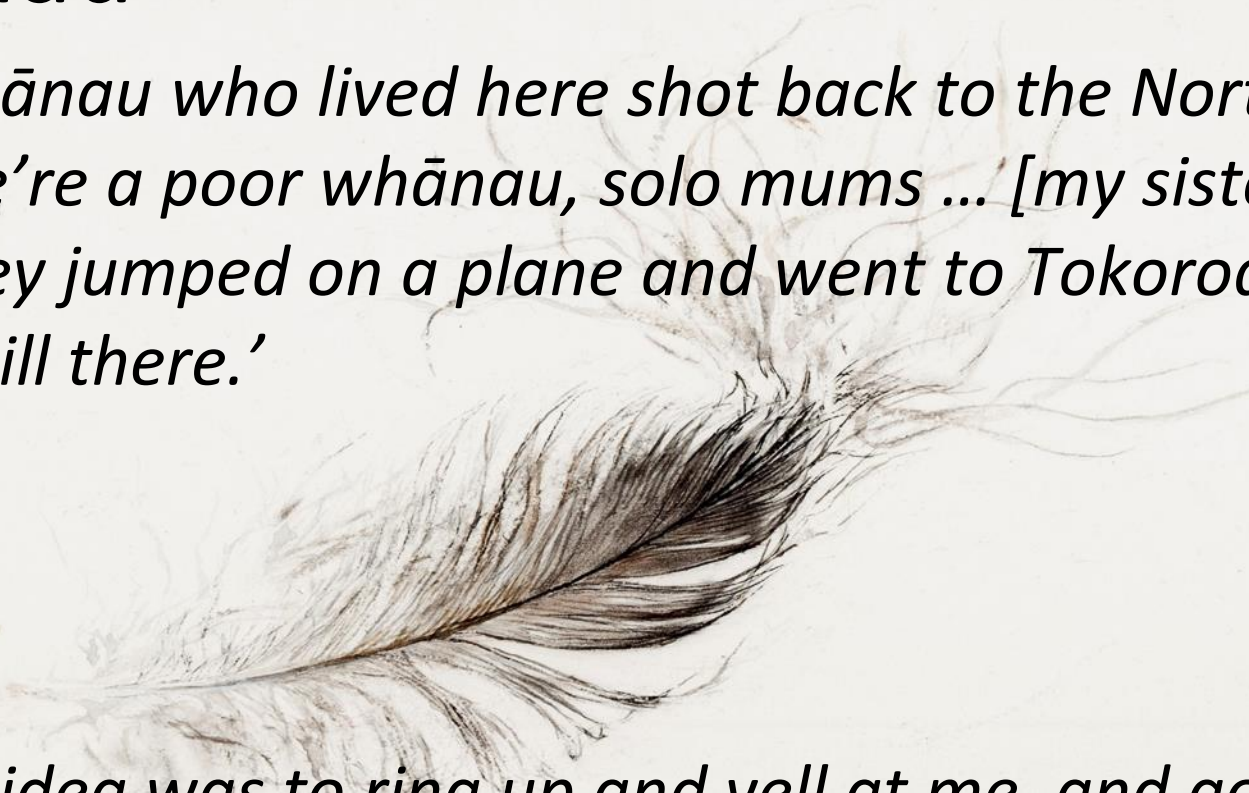


*To think we were so proud of our crystal!*

*I don't go out much anymore, I'm more 'stay at home'. I don't like going to malls, I'm not keen on big crowds now, especially inside...*

# Whanau

*All my whānau who lived here shot back to the North Island, we're a poor whānau, solo mums ... [my sister] with 8 kids, they jumped on a plane and went to Tokoroa. They're still there.'*

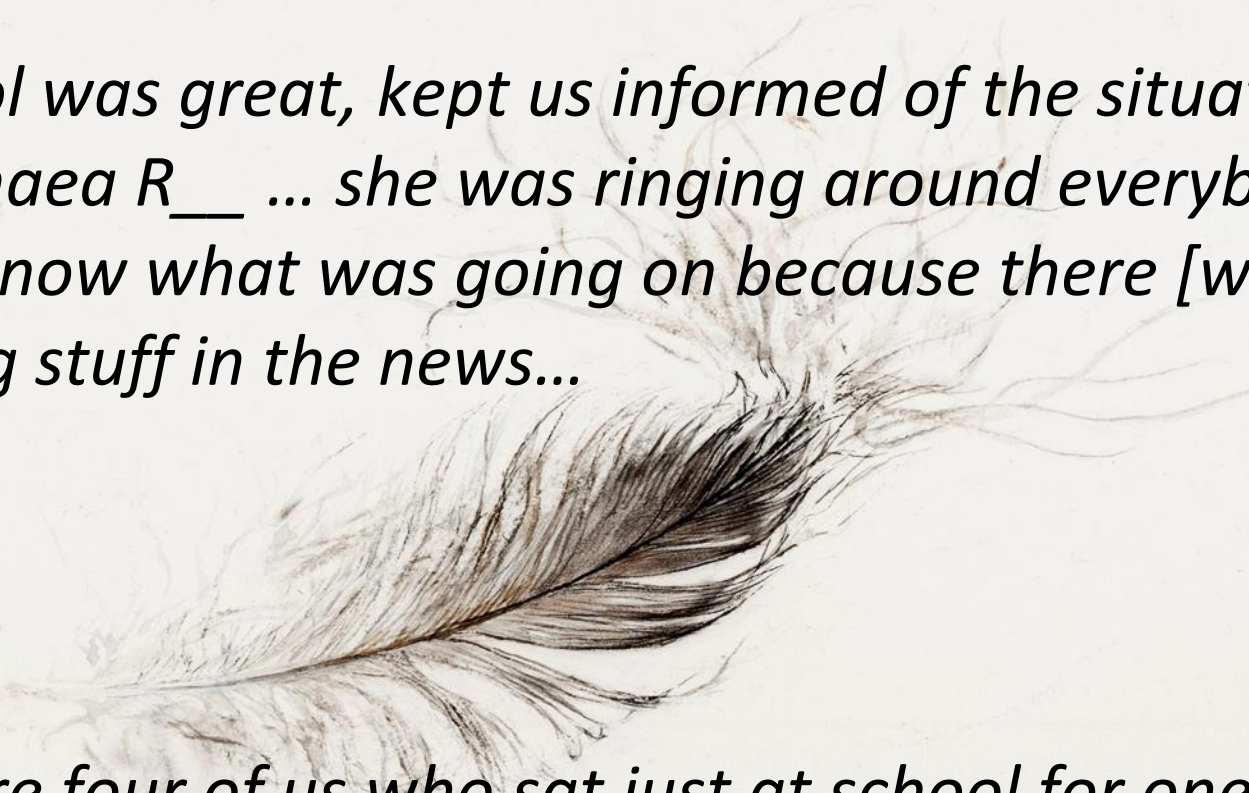


*My dad's idea was to ring up and yell at me, and go 'go home!' ... But the reality is we didn't want to go back, we didn't want to live on the marae. Because when we come back, it's still gonna be here. Nothing's going to change.*



# Kura

*The school was great, kept us informed of the situation there. Whaea R\_\_\_ ... she was ringing around everybody ... to let us know what was going on because there [was] conflicting stuff in the news...*



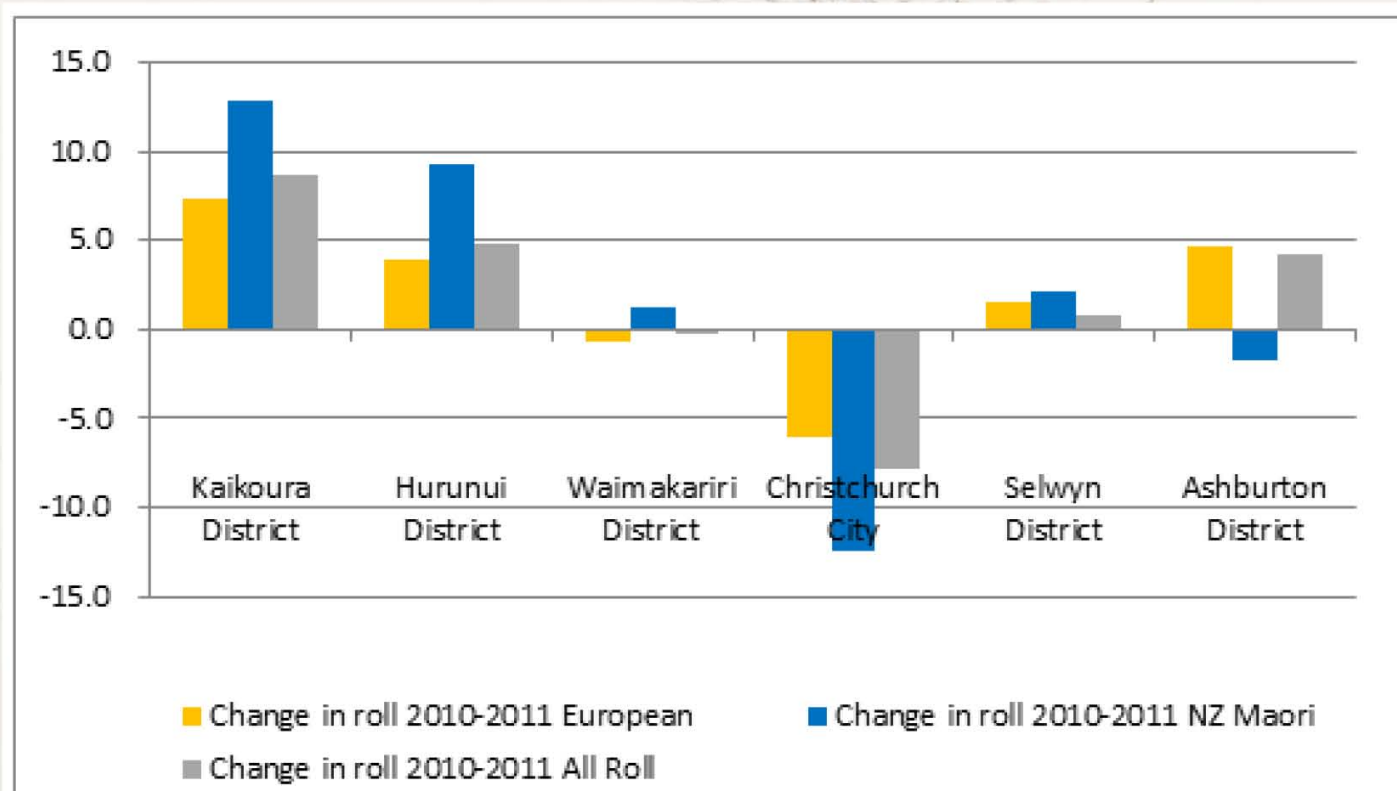
*There were four of us who sat just at school for one day, and if we couldn't ring them, we'd go and visit them. The people we were a bit more concerned about, we'd ring not just that once, we rang a few times to see if they needed anything else.*

# School enrolments

Age (July 2011)	Pakeha	NZ Maori	Samoan	All Ethncities
6 yrs	-2.5%	-11.3%	-13.9%	-4.3%
7 yrs	-3.9%	-12.7%	-13.1%	-6.1%
8 yrs	-3.4%	-10.7%	-24.1%	-5.8%
9 yrs	-3.8%	-10.0%	-21.1%	-5.3%
10 yrs	-3.3%	-10.2%	-14.2%	-4.5%
11 yrs	-1.9%	-6.3%	-16.4%	-3.5%
12 yrs	-2.9%	-9.9%	-13.5%	-5.2%
13 yrs	-0.1%	0.9%	-22.0%	-0.9%
14 yrs	-1.2%	-7.9%	-13.8%	-2.6%
15 yrs	-2.5%	-4.5%	-12.1%	-2.6%



# School enrolments



Source: Newell (2012).

# Kura

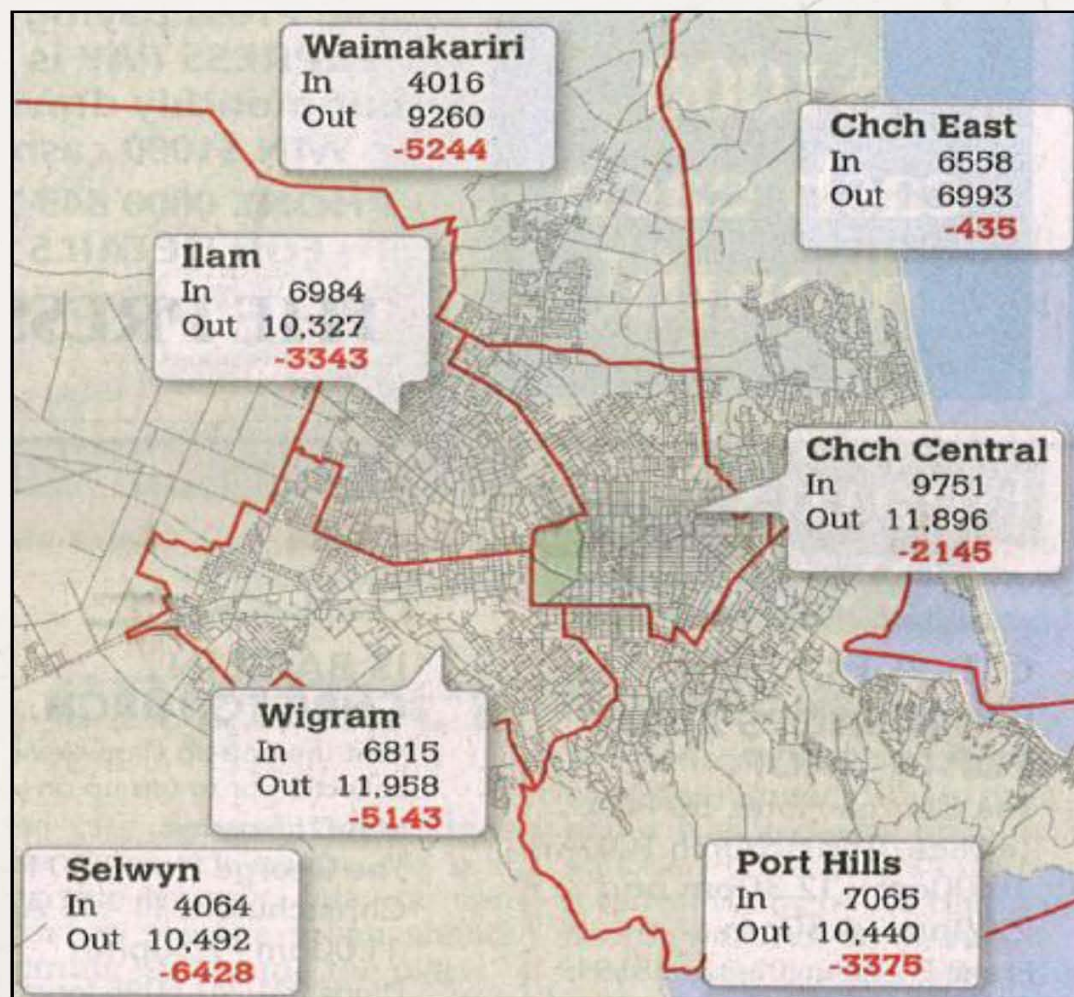
*The kids were pretty good though because the week before, they were at Nōku Te Ao, then for that I think three or four weeks they had been learning about Rūaumoko so when it happened we were all freaking out like 'oh my god! I can't believe this is happening!' ...*

*you know, as you do!*

*The kids are like 'oh that's Rūaumoko in Papatūānuku's puku, he's just having a kanikani...' So they were all good, they went straight into their turtle and knew what to do, so that was cool.*

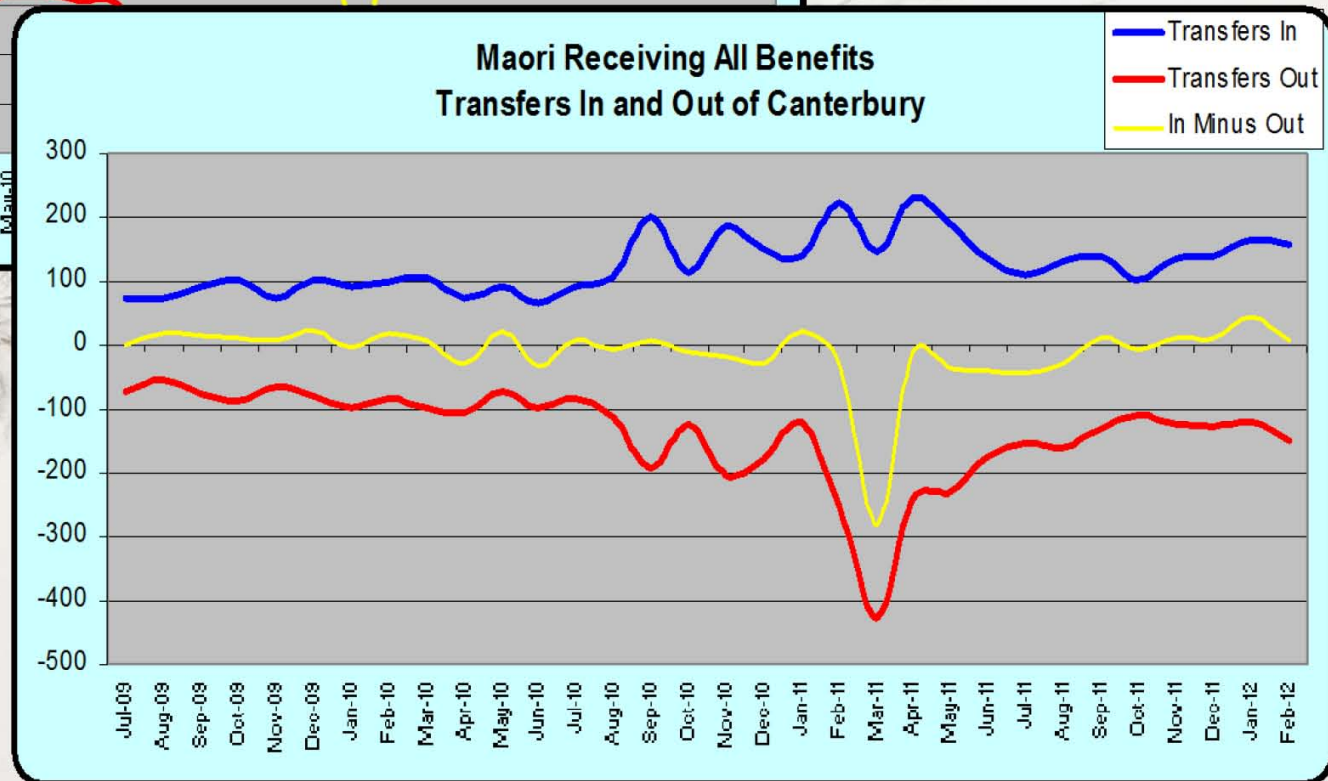
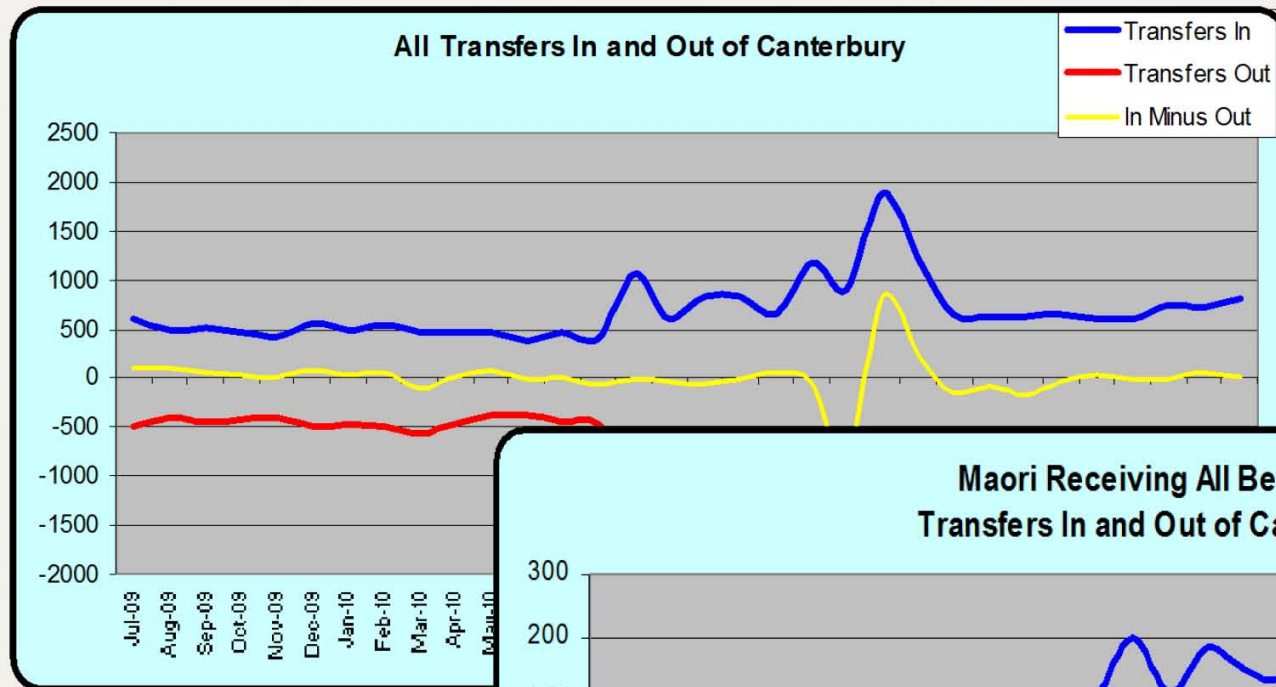


# Neighbourhoods



Population movements (Source: The Press)

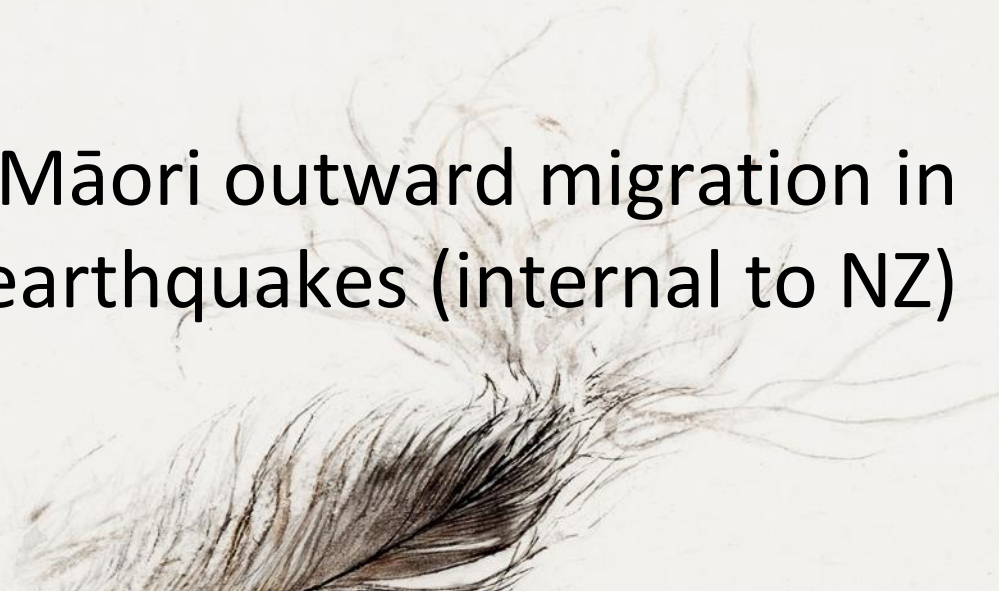
# Movements





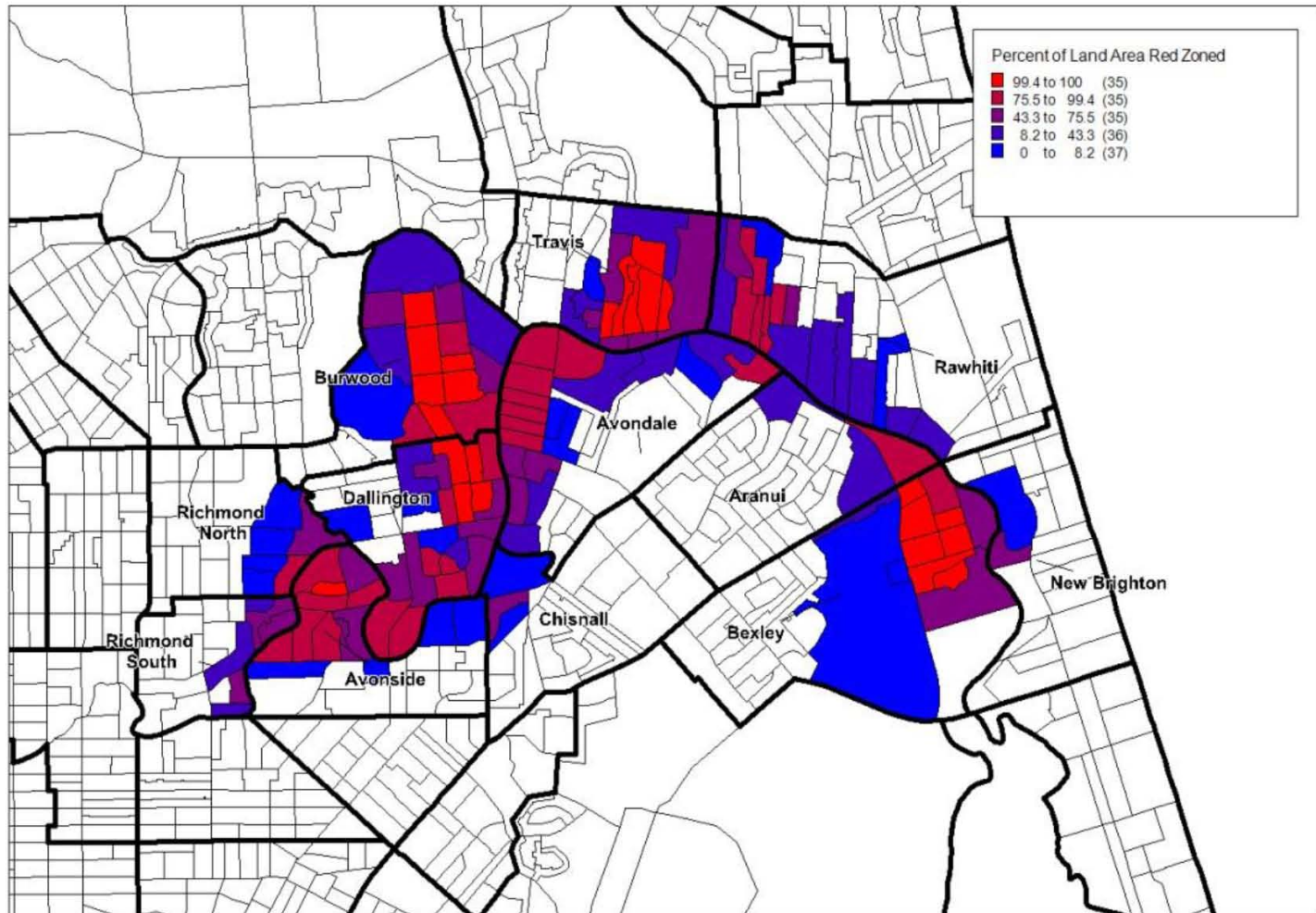
# Movements

- Estimates of Māori outward migration in response to earthquakes (internal to NZ)



	% migration	Raw numbers
Low estimate	2%	560
Mid-range estimate	3%	845
High estimate	3.5%	990
Maximum estimate	4%	1,060

# Neighbourhoods

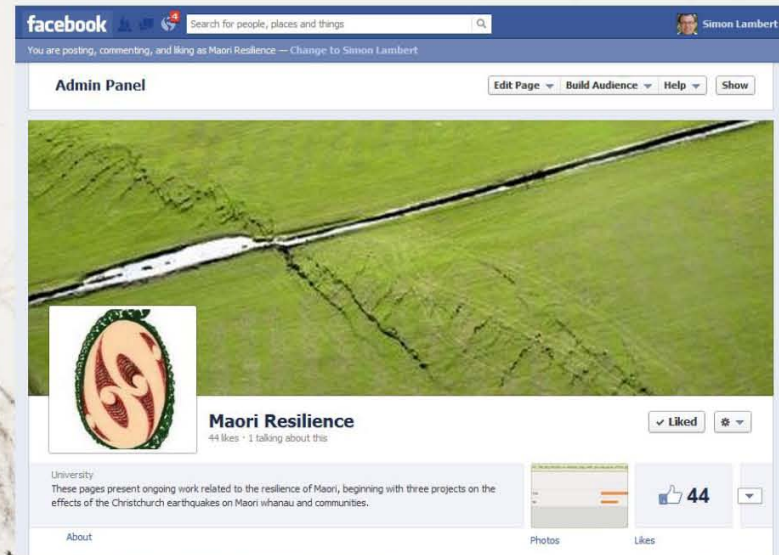
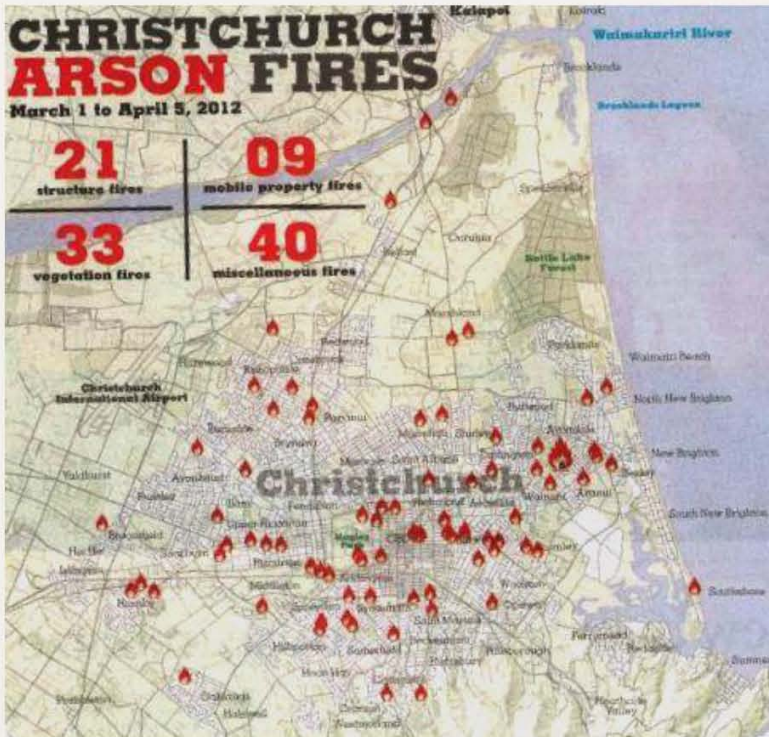


# Neighbourhoods



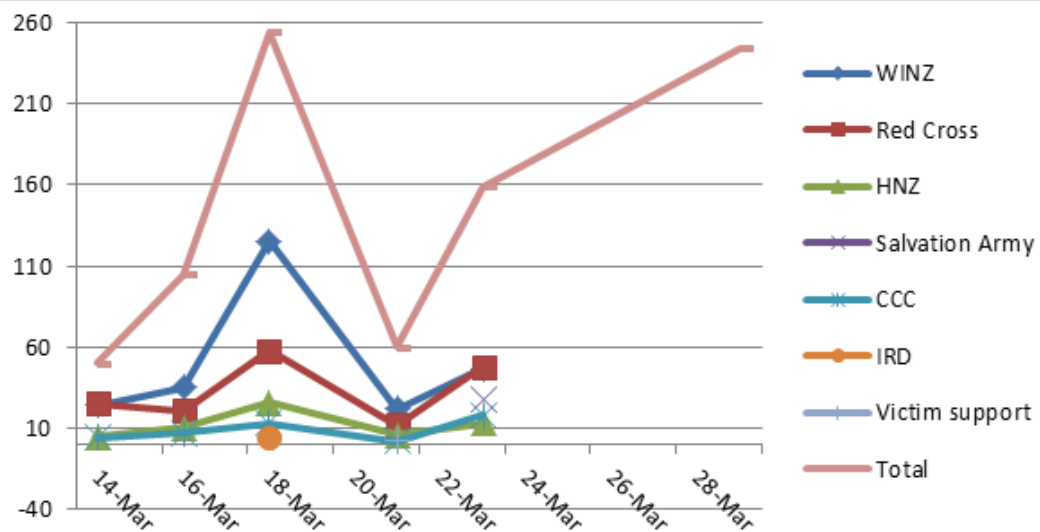


# Maori Communities





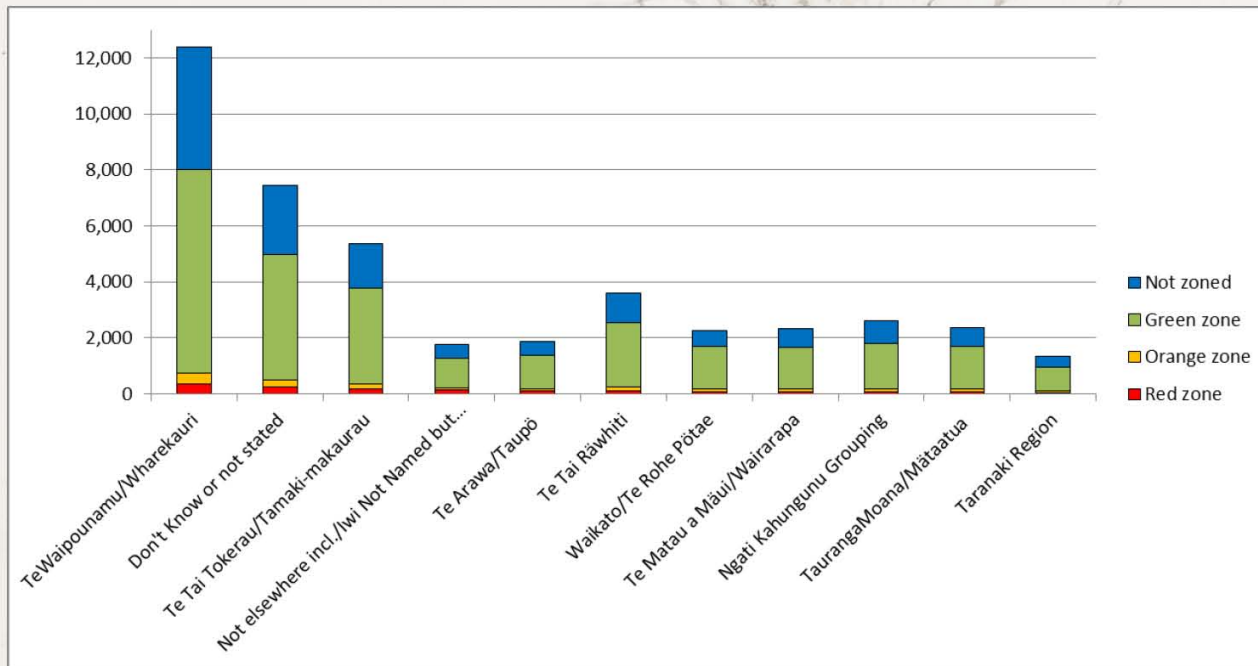
Pipitea marae, Wellington



Queries to Ngā Hau e Wha...



# Iwi 1: Ngā Maata Waka...



Iwi and EQC Zoning. Based on third quarter 2011 EQ zoning of land use blocks summed to meshblock level and Māori population estimates from the 2006 meshblock database (by ward and local authority).



# Iwi 2: Ngai Tahu...

- Formal stakeholder in CERA (2011)



Te Rūnanga o NGĀI TAHU

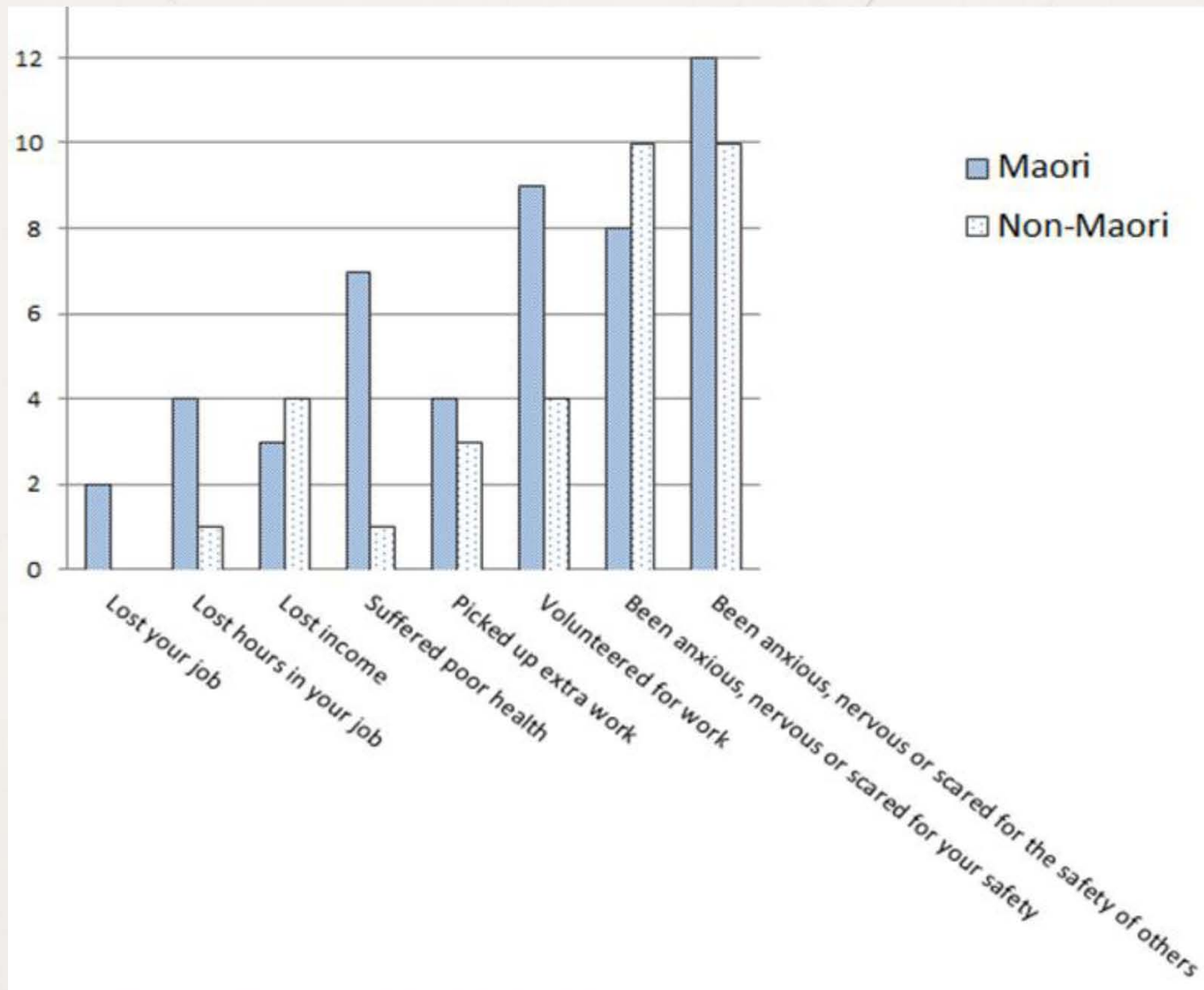
## He Huanui Ara Ake mō Waitaha – a pathway to recovery for Canterbury



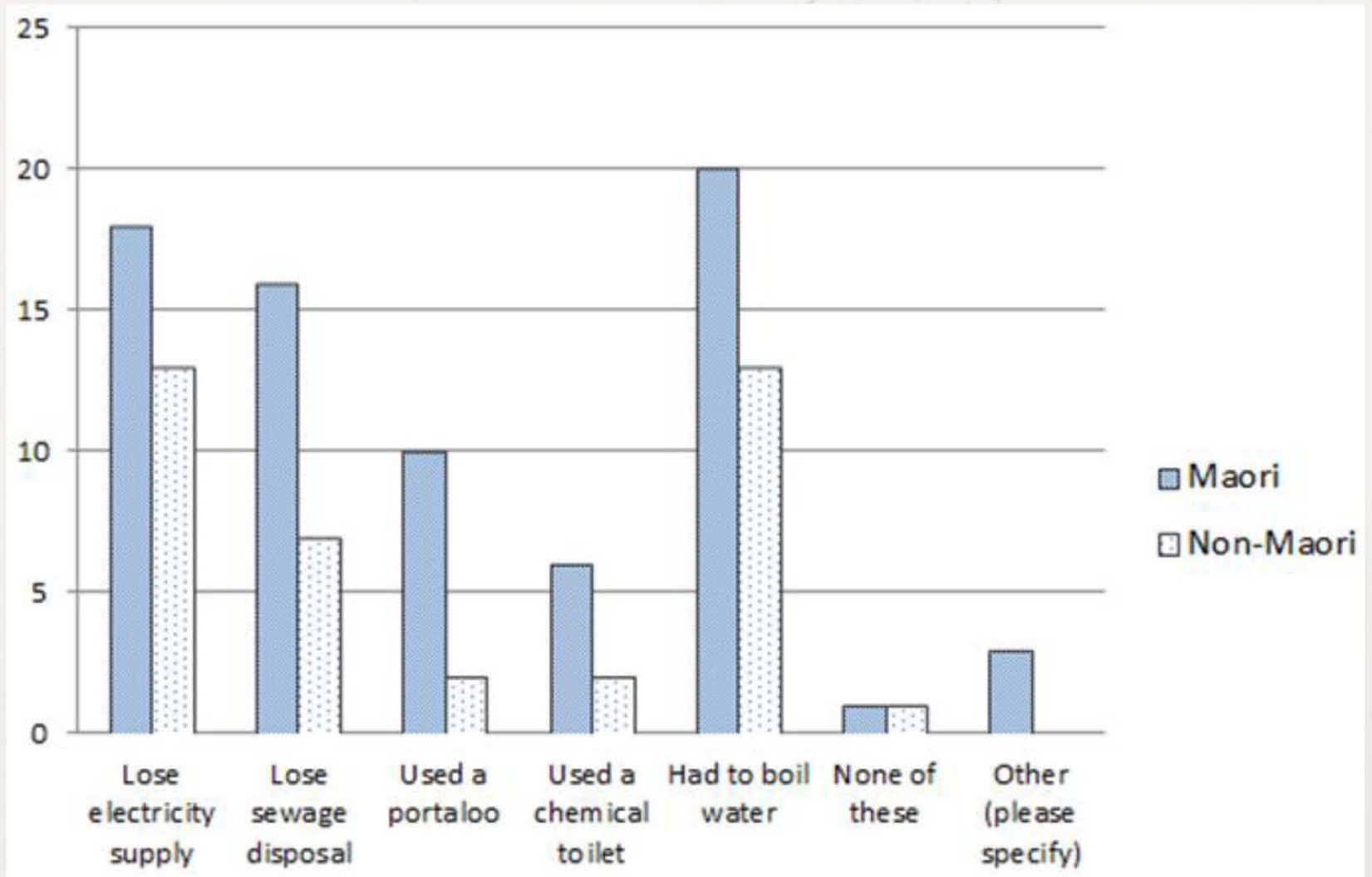
Ngāi Tahu's preliminary tribal positions and priorities  
for the draft CERA Recovery Strategy  
for Greater Christchurch

22 July 2011

# Survey results...

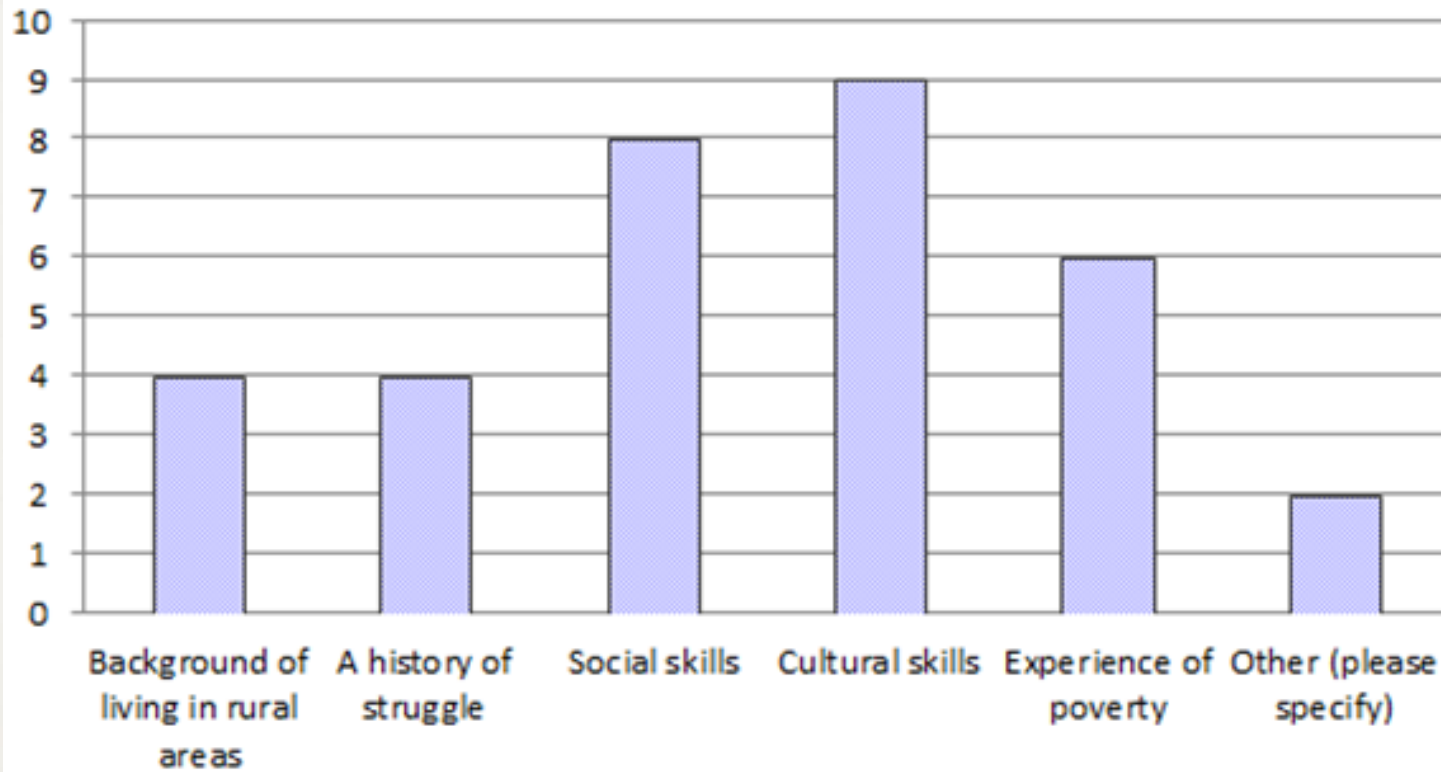


# Survey results...

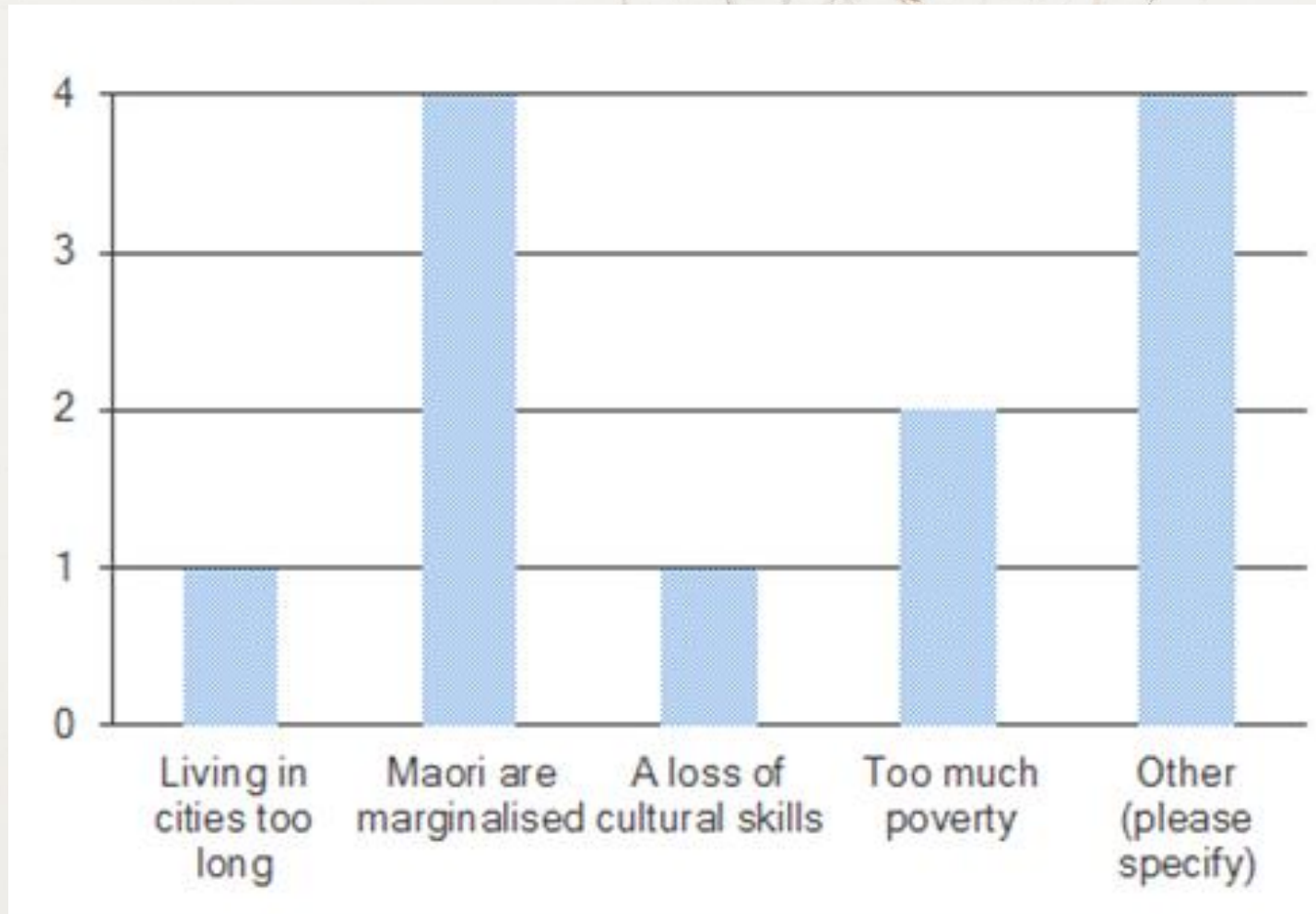




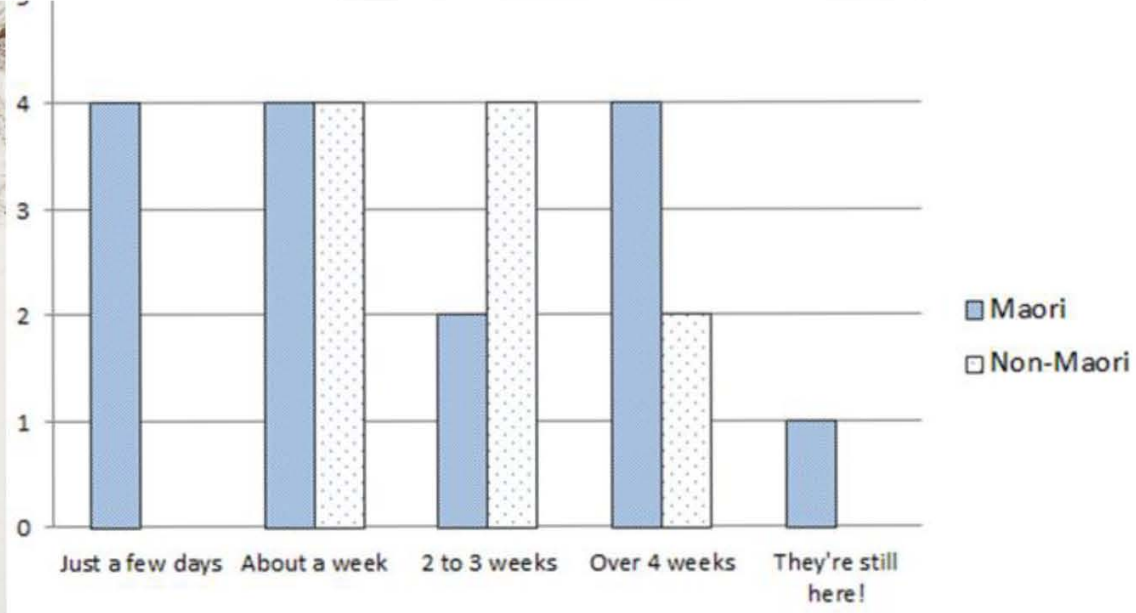
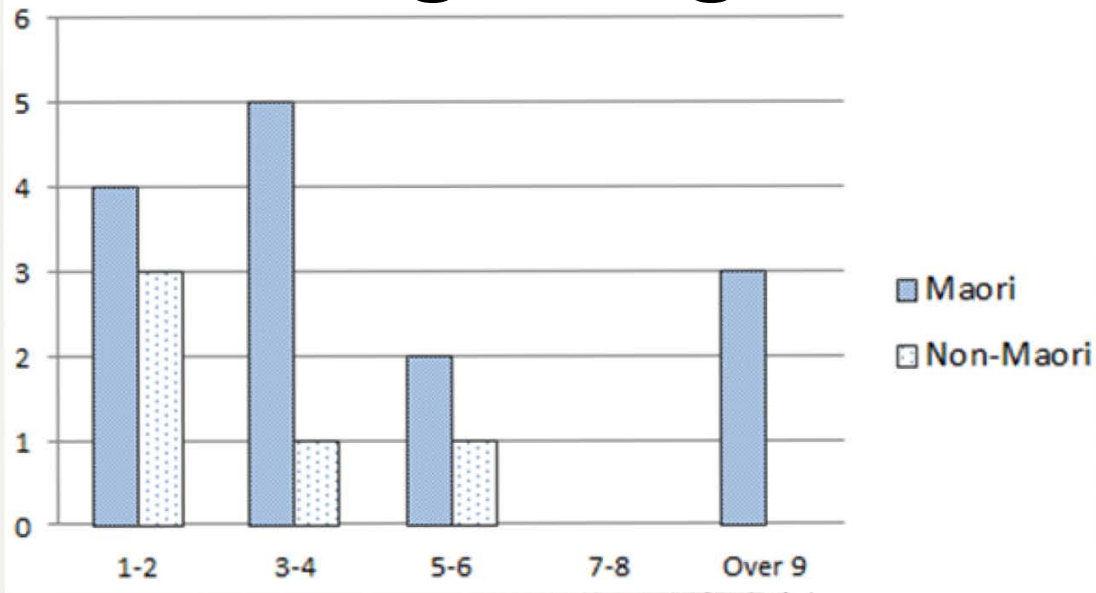
# Survey results...Maori better at disasters?



# Survey results...Maori worse at disasters?



# Hosting refugees...





# Survey results...

How would you describe your personal well-being in each of these four areas before the February 22nd, 2011, earthquake?

	Very strong	Strong	Good	Average	Weak	Very weak	Response Count
Overall economic well-being (for example, income, job, work hours, mortgage, benefit)	35.0% (7)	45.0% (9)	20.0% (4)	0.0% (0)	0.0% (0)	0.0% (0)	20
Overall social well-being (for example, sports, church, pub, parties, clubs)	25.0% (5)	45.0% (9)	15.0% (3)	5.0% (1)	10.0% (2)	0.0% (0)	20
Overall environmental well-being (for example, beach, fishing, gardening, walking)	25.0% (5)	45.0% (9)	15.0% (3)	10.0% (2)	5.0% (1)	0.0% (0)	20
Overall cultural well-being (for example, arts and crafts, kapahaka, museum, wananga, music)	30.0% (6)	25.0% (5)	30.0% (6)	15.0% (3)	0.0% (0)	0.0% (0)	20

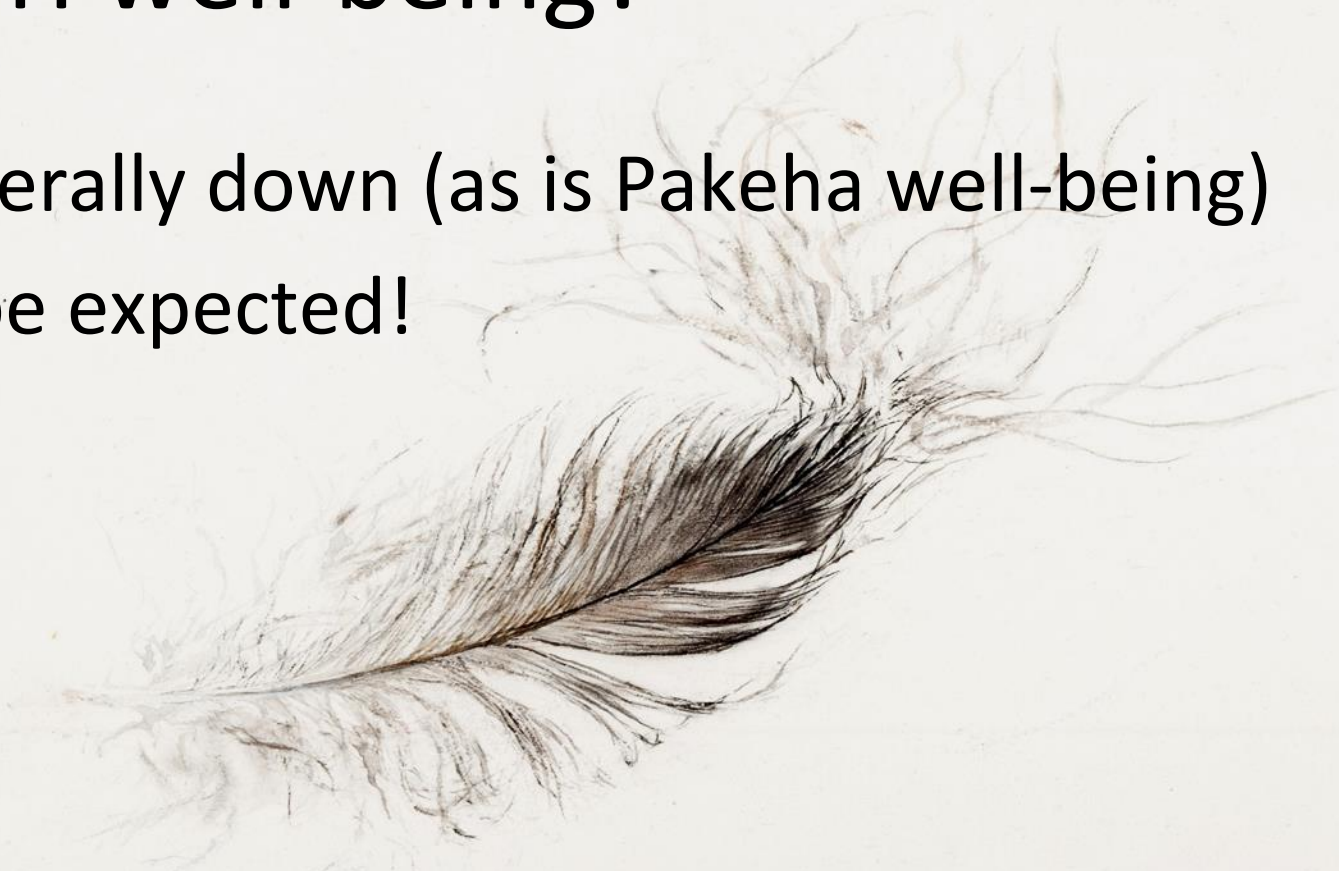
# Survey results...

## How would you describe your personal well-being now?

	Very strong	Strong	Good	Average	Weak	Very weak	Response Count
Overall economic well-being (for example, income, job, work hours, mortgage, benefit)	20.0% (4)	25.0% (5)	40.0% (8)	15.0% (3)	0.0% (0)	0.0% (0)	20
Overall social well-being (for example, sports, church, pub, parties, clubs)	10.0% (2)	20.0% (4)	20.0% (4)	25.0% (5)	20.0% (4)	5.0% (1)	20
Overall environmental well-being (for example, beach visits, fishing, gardening, walking)	10.0% (2)	25.0% (5)	25.0% (5)	20.0% (4)	15.0% (3)	5.0% (1)	20
Overall cultural well-being (for example, arts and crafts, kapahaka, museum, wananga)	10.0% (2)	15.0% (3)	25.0% (5)	30.0% (6)	15.0% (3)	5.0% (1)	20

# Maori well-being?

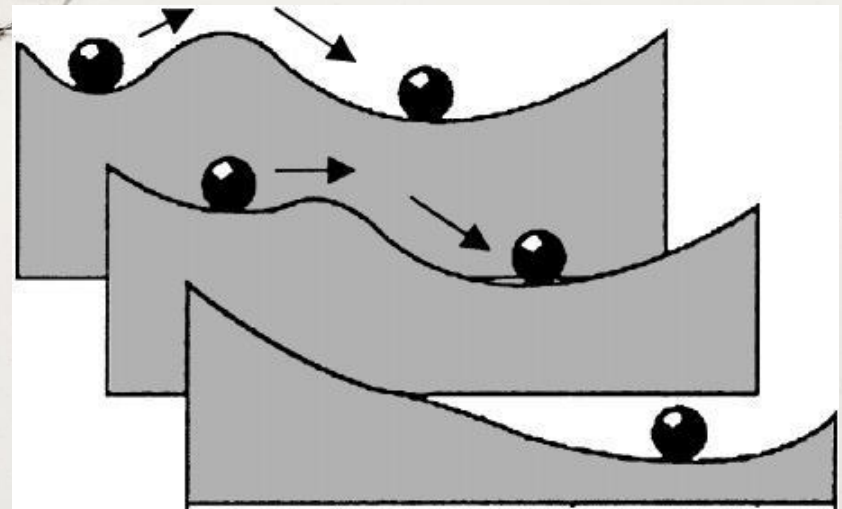
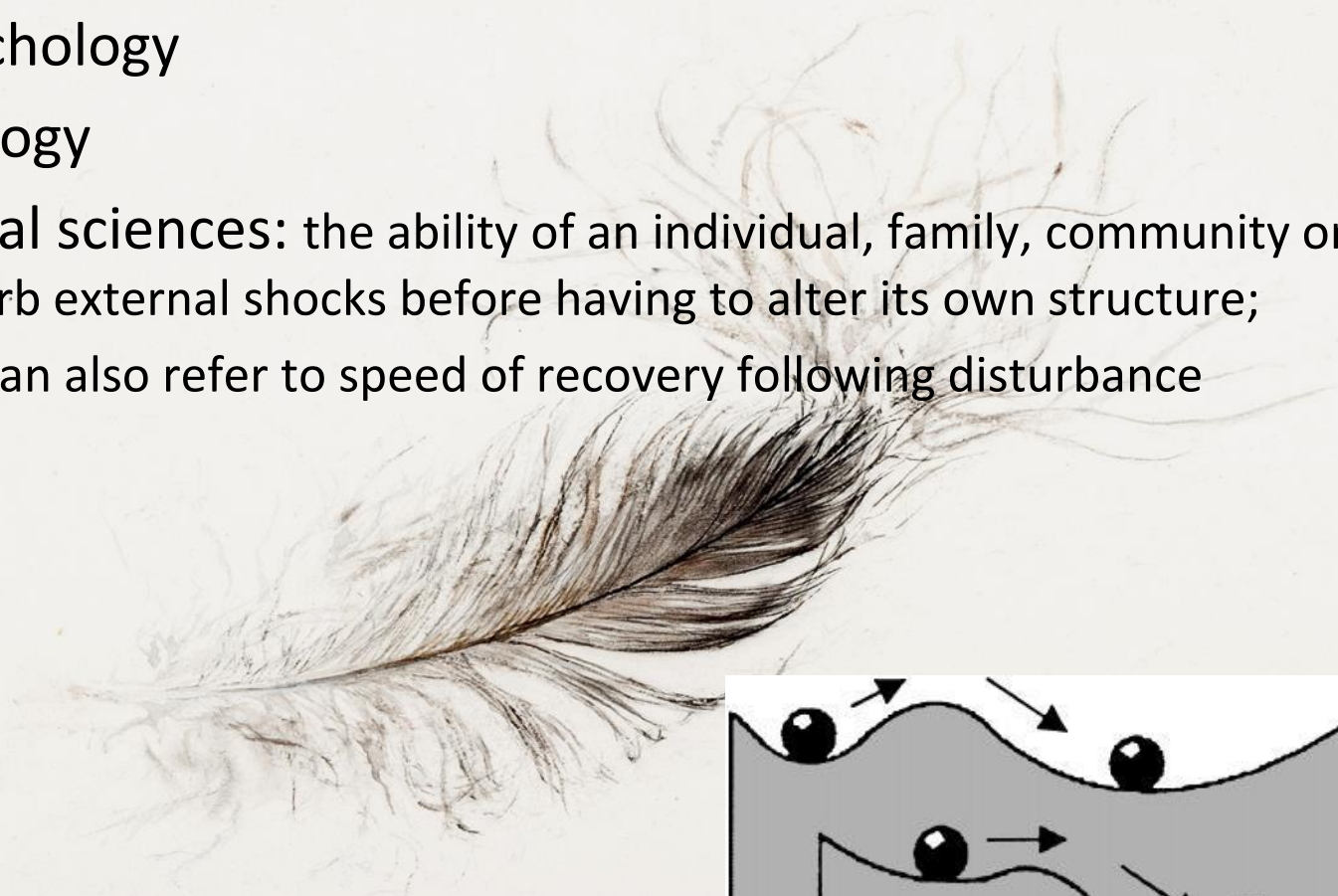
- Generally down (as is Pakeha well-being)
- To be expected!



- What about resilience?



- Resilience is a nuanced and contested concept
  - Psychology
  - Ecology
  - Social sciences: the ability of an individual, family, community or system to absorb external shocks before having to alter its own structure;
    - can also refer to speed of recovery following disturbance




# Maori Resilience

Wellbeing and Resilience scores for Maori survey respondents...

Case	econ1	soc1	envt1	cult1	econ2	soc2	envt2	cult2	wb1	wb2	Res
19	1	0.2	0.2	0.6	0.8	1	1	0.6	2	3.4	1.4
20	0.8	0.2	0.4	0.4	1	0.6	0.6	0.4	1.4	2.6	1.2
23	0.8	1	1	1	1	1	1	1	3.8	4	0.2
6	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	3.2	3.2	0
8	1	1	0.8	1	1	1	0.8	1	3.8	3.8	0
21	0.6	0.8	0.8	0.6	0.6	0.8	0.8	0.6	2.8	2.8	0
2	1	1	1	0.6	1	0.8	1	0.6	3.6	3.4	-0.2
11	0.6	0.4	0.8	0.4	0.8	0.4	0.4	0.4	2.2	2	-0.2
13	0.6	0.8	0.8	0.4	0.8	0.6	0.4	0.6	2.6	2.4	-0.2
16	0.8	0.6	0.4	1	0.6	0.4	0.6	1	2.8	2.6	-0.2
10	0.8	0.8	0.8	0.8	0.8	0.6	0.6	0.8	3.2	2.8	-0.4
15	0.6	0.6	0.6	0.6	0.4	0.4	0.6	0.6	2.4	2	-0.4
14	0.8	0.8	0.6	0.6	0.6	0.6	0.4	0.4	2.8	2	-0.8
18	0.8	0.8	0.8	0.8	0.8	0.4	0.8	0.4	3.2	2.4	-0.8
12	0.6	0.6	0.6	0.6	0.6	0.2	0.4	0.2	2.4	1.4	-1
17	1	0.8	0.8	1	0.6	0.6	0.8	0.6	3.6	2.6	-1
22	0.8	0.8	0.6	0.8	0.6	0.6	0.4	0.4	3	2	-1
1	1	1	1	1	0.6	0.4	0.6	0.8	4	2.4	-1.6
9	0.8	0.8	0.8	0.8	0.4	0.2	0.4	0.4	3.2	1.4	-1.8
3	0.8	1	1	1	0.6	0.8	0.2	0.2	3.8	1.8	-2
4	0.8	0.8	0.8	0.8	0.6	0.2	0.2	0.2	3.2	1.2	-2

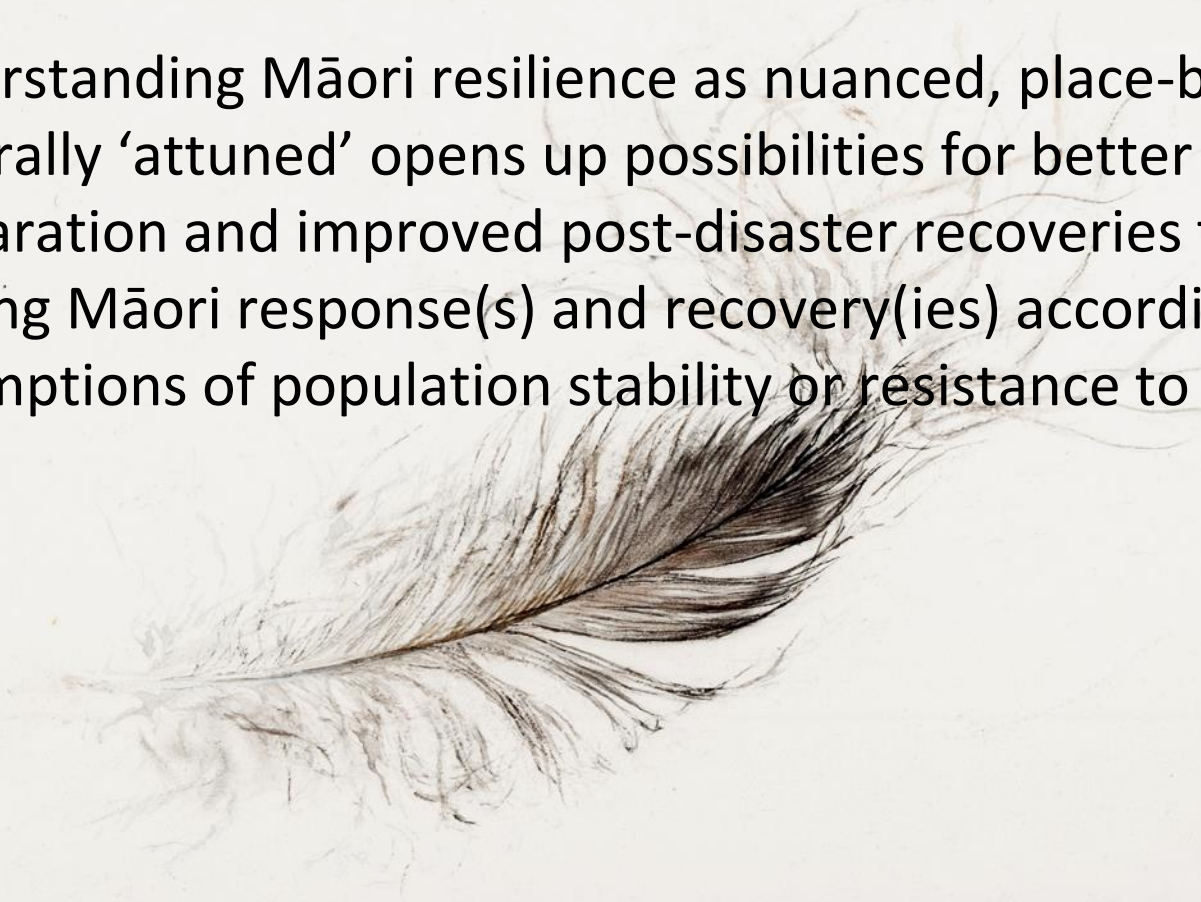
# Maori Resilience

- Various pathways to resilience BUT...
- 
- Personal income (and qualifications, and economic well-being pre 22-2) seem to be fundamental to the resilience displayed by our participants.



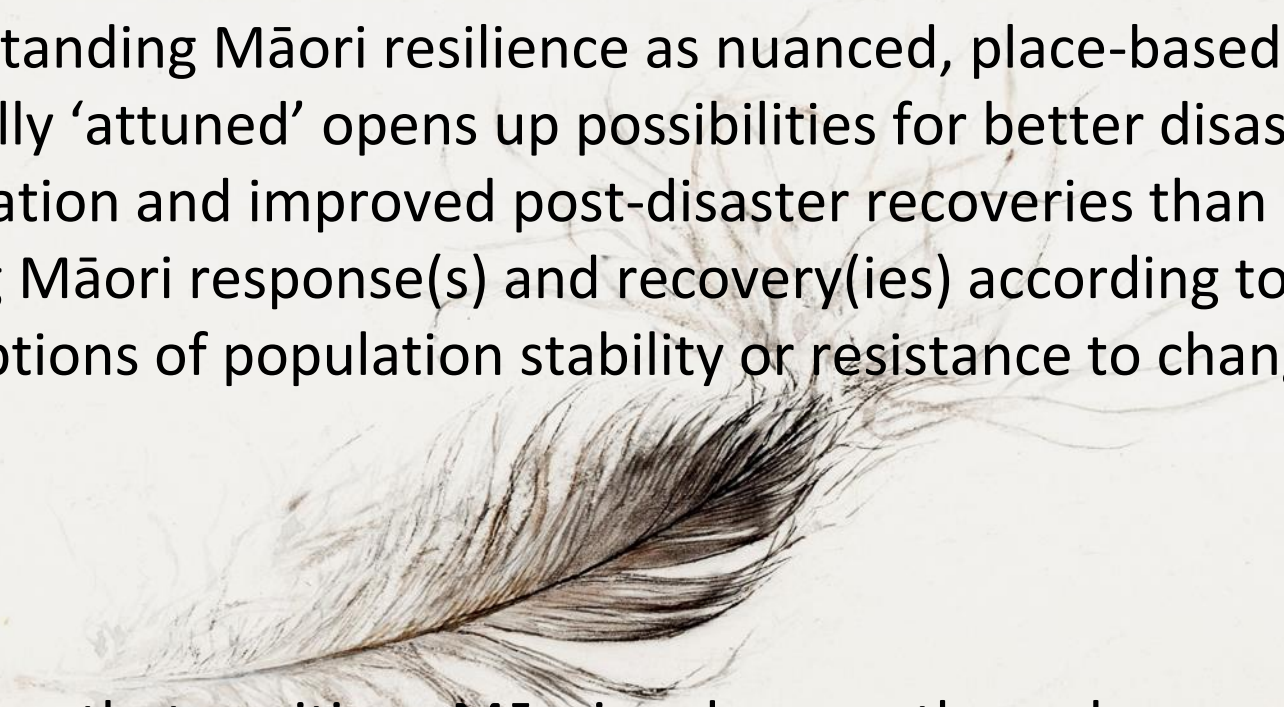
# Maori Resilience

- Understanding Māori resilience as nuanced, place-based and culturally 'attuned' opens up possibilities for better disaster preparation and improved post-disaster recoveries than simply judging Māori response(s) and recovery(ies) according to assumptions of population stability or resistance to change.

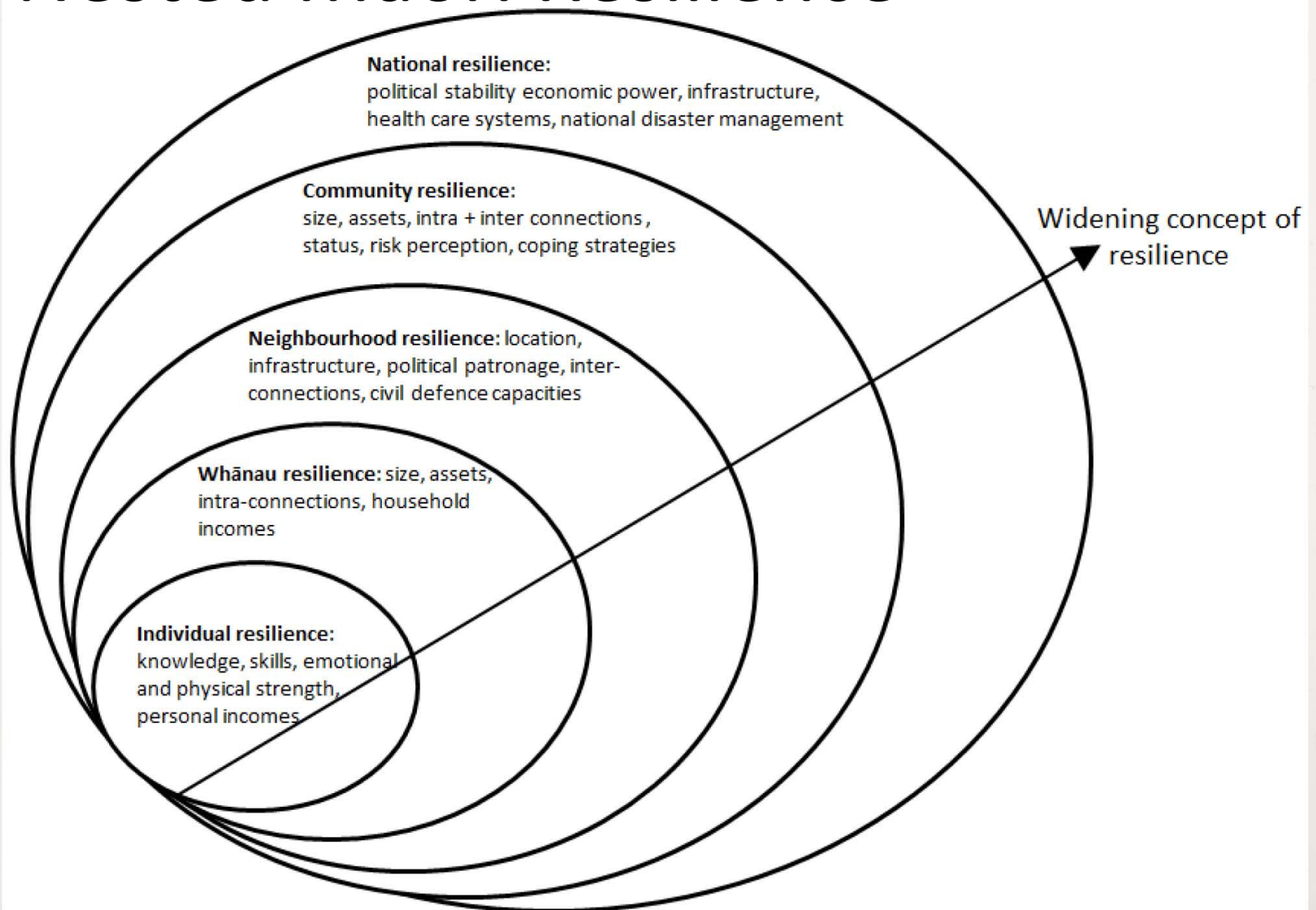


# Maori Resilience

- Understanding Māori resilience as nuanced, place-based and culturally 'attuned' opens up possibilities for better disaster preparation and improved post-disaster recoveries than simply judging Māori response(s) and recovery(ies) according to assumptions of population stability or resistance to change.
- Discourse that positions Māori endurance through generations of poverty ignores a key component of resilience to disasters, namely economic security.

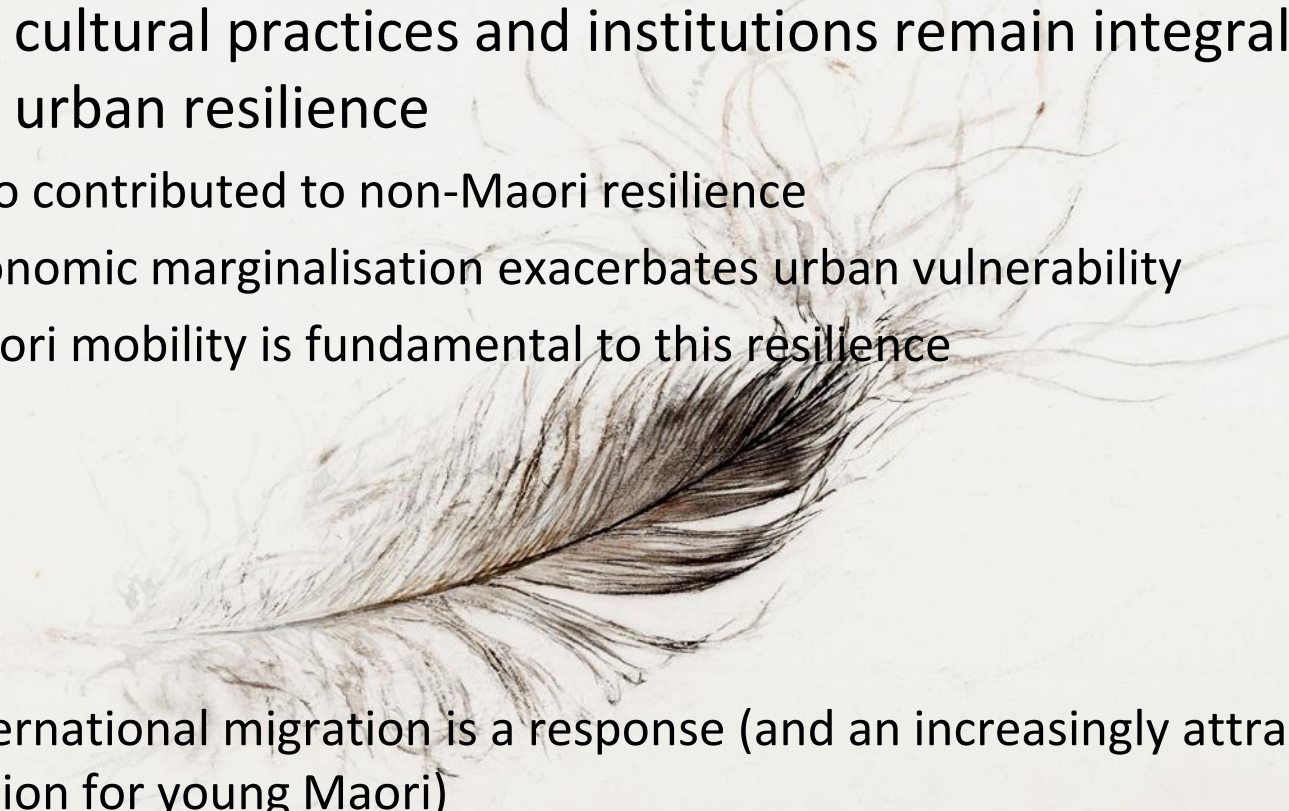


# Nested Maori Resilience





# Conclusions

- Maori cultural practices and institutions remain integral to Maori urban resilience
    - Also contributed to non-Maori resilience
    - Economic marginalisation exacerbates urban vulnerability
    - Maori mobility is fundamental to this resilience
  - International migration is a response (and an increasingly attractive option for young Maori)
  - Indigenous communities increasingly urbanised
  - Increasing vulnerability to new and emerging hazards
- 

# Kia ora

<http://www.lincoln.ac.nz/conversation/maori-resilience>

<http://www.facebook.com/MaoriResilience>



## He patai?



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University**  
*Te Whare Wānaka o Aoraki*  
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